# MA2J7280G

## Silicon epitaxial planar type

For super high speed switching
For wave detection

### ■ Features

- Low forward voltage $V_F$ and good wave detection efficiency η
- Small reverse current $I_R$
- Small temperature coefficient of forward characteristic

### ■ Package

- Code
  SMini2-F3
- Pin Name
  1: Anode
  2: Cathode

### ■ Marking Symbol: 2A

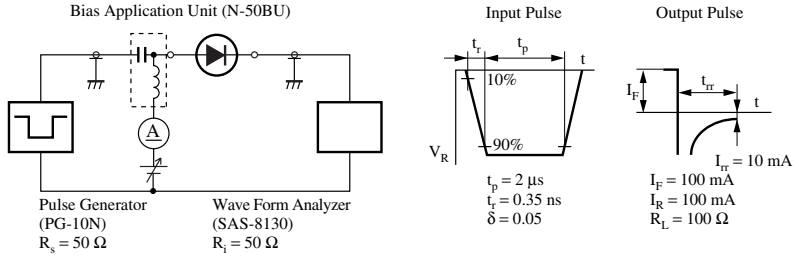
### ■ Absolute Maximum Ratings $T_a = 25°C$

| Parameter | Symbol | Rating | Unit |
|---|---|---|---|
| Reverse voltage | $V_R$ | 30 | V |
| Maximum peak reverse voltage | $V_{RM}$ | 30 | V |
| Forward current | $I_F$ | 30 | mA |
| Peak forward current | $I_{FM}$ | 150 | mA |
| Junction temperature | $T_j$ | 125 | °C |
| Storage temperature | $T_{stg}$ | −55 to +125 | °C |

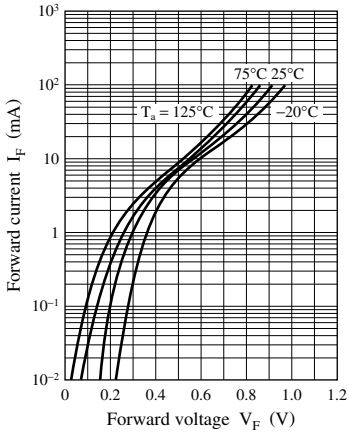
### ■ Electrical Characteristics $T_a = 25°C \pm 3°C$

| Parameter | Symbol | Conditions | Min | Typ | Max | Unit |
|---|---|---|---|---|---|---|
| Forward voltage | $V_{F1}$ | $I_F$ = 1 mA | | | 0.4 | V |
| | $V_{F2}$ | $I_F$ = 30 mA | | | 1.0 | |
| Reverse current | $I_R$ | $V_R$ = 30 V | | | 300 | nA |
| Terminal capacitance | $C_t$ | $V_R$ = 1 V, f = 1 MHz | | 1.5 | | pF |
| Reverse recovery time * | $t_{rr}$ | $I_F = I_R$ = 10 mA<br>$I_{rr}$ = 1 mA, $R_L$ = 100 Ω | | 1.0 | | ns |
| Detection efficiency | η | $V_{IN} = 3\ V_{(peak)}$ , f = 30 MHz<br>$R_L$ = 3.9 kΩ, $C_L$ = 10 pF | | 65 | | % |

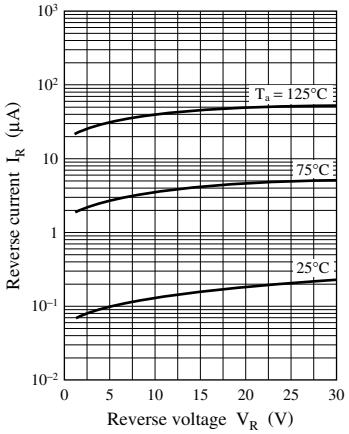
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.
2. This product is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.
3. Absolute frequency of input and output is 2 GHz.
4. *: $t_{rr}$ measurement circuit



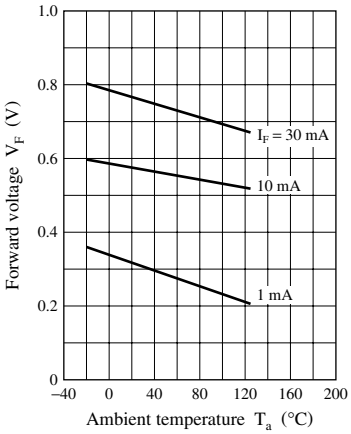
$I_F$ — $V_F$



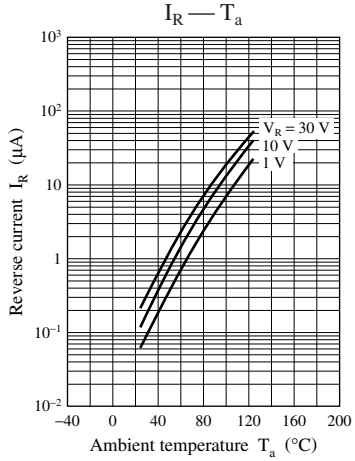

$I_R$ — $V_R$



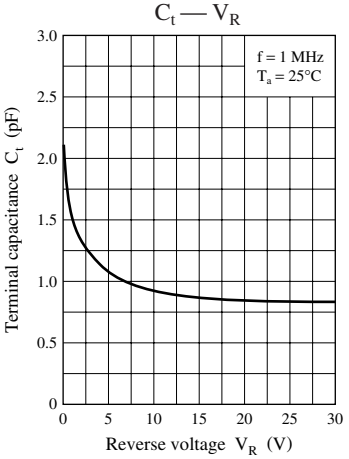

$V_F$ — $T_a$



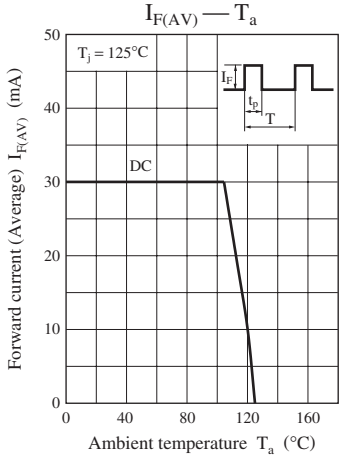

$I_R$ — $T_a$




$C_t$ — $V_R$

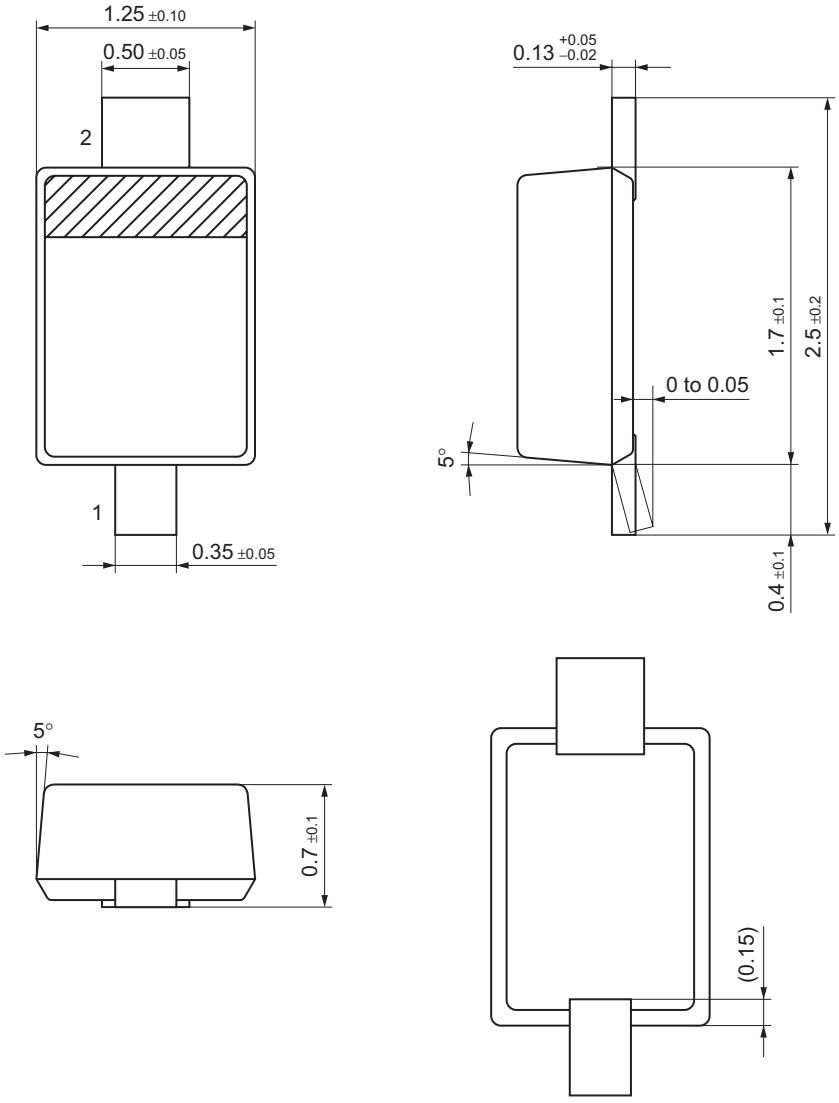



$I_{F(AV)}$ — $T_a$



# SMini2-F3

Unit: mm



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